

# Grade 7 AIMS Reference Sheet

Use 3.14 or  $\frac{22}{7}$  for  $\pi$ .

## Plane Figures: Perimeters and Areas

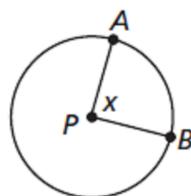
Name	Notation	Circumference (C) Perimeter (P)	Area (A)
Circle	$r$ = radius $d$ = diameter	$C = \pi d$ or $C = 2\pi r$	$A = \pi r^2$
Parallelogram	$a, b$ = sides $h$ = height	$P = 2(a + b)$	$A = bh$
Rectangle	$l$ = length $w$ = width	$P = 2(l + w)$	$A = lw$
Trapezoid	$a, b, c, d$ = sides $b_1$ = long base $b_2$ = short base $h$ = height	$P = a + b + c + d$	$A = \frac{1}{2}h(b_1 + b_2)$
Triangle	$a, b, c$ = sides $h$ = height	$P = a + b + c$	$A = \frac{1}{2}bh$ or $A = \frac{bh}{2}$

## Geometric Solids: Volumes and Surface Areas

Name	Notation	Volume (V)
Rectangular Prism	$l$ = length $w$ = width $h$ = height	$V = lwh$
Right Cylinder	$r$ = radius $h$ = height	$V = \pi r^2 h$

## Angle Formulas

Central Angle Formula:



$$m\angle X = m\widehat{AB}$$

where  $P$  is the center of the circle.

Sum of the measures of the interior angles of a convex polygon with  $n$  sides:

$$S = (n - 2)(180^\circ)$$